SLEEP-RELATED BREATHING DISORDERS IN ADULTS: TOPICS OF CURRENT SCIENTIFIC RESEARCH AND SIGNIFICANT UPDATES OF PRACTICAL RECOMMENDATIONS

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Abstract

Respiratory disorders during sleep are an urgent and multifaceted problem of clinical medicine, in which the insufficient practical implementation of medical care for patients does not correspond to fundamental scientific achievements.

The aim of this review was to assess the significant updates of practical recommendations for the diagnosis and treatment of sleep-disordered breathing in adults.

The global lack of practical success in the treatment of patients with sleep-related breathing disorders supports the high relevance of the problem and prompts new research in pathology (biomarkers, structural disorders, risk factors, etc.) and modification of devices for diagnosis and therapy. Today, the classification of sleep-related breathing disorders has been updated. The functional criteria of polysomnography in determining ventilation disorders have been clarified. Diagnostic criteria for disorders associated with obstructive and central sleep apnea have undergone minor changes. Updated practice guidelines for obstructive sleep apnea include failure of CPAP therapy, revised indications for positional therapy, and upper airway or bariatric surgery. Updates in the treatment of central sleep apnea relate to the functional state of the heart and the type of respiratory disorder. In heart failure with a reduced ejection fraction adaptive servo-ventilation is contraindicated, in hypercapnia and/or hypoventilation during the rapid phase of sleep non-invasive lung ventilation is required. Current updates recommend positive airway pressure therapy (CPAP-therapy for concomitant severe obstructive sleep apnea) in stable outpatients with obesity-hypoventilation syndrome, and noninvasive ventilation in hospitalized patients with respiratory failure. General approaches to treatment remain constant: ventilatory disorders require appropriate mechanical correction.

Key words: sleep-related breathing disorders, obstructive sleep apnea, central sleep apnea.

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